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Effect of dual frequency rf power in an inductively coupled plasma JU-HO KIM, HO-WON LEE, TAE WOO KIM, CHIN-WOOK CHUNG, Department of Electrical Engineering, Hanyang University — Dual frequency inductively coupled plasma discharge is investigated. Dual RF power is applied independently to each antenna (inner and outer coil), and the electron energy distribution functions (EEDFs) are measured using a RF compensated Langmuir probe. As the ratio of low frequency power (P_{low}) and high frequency power (P_{high}) is changed, the variation of EEDF is observed. When P_{low} is higher than P_{high} , the low energy electrons effectively heated compared to the case when P_{low} is comparable to P_{high} . This difference in the shape of the EEDF can be understood by correlation between the driving frequency and the collision frequency.

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